

Wellness by the Month

FREE RADICALS and ANTIOXIDANTS

What are Free Radicals?

Free radicals are cells that are unstable due to an odd number of electrons. This odd number may be caused by a process called oxidation. Oxidation causes a slice of apple to turn brown as it produces a chemical reaction in the cells. Although oxidation is a very natural process, and dead cells are generally replaced by new cells, one to two percent of cells will get damaged in the process and turn into free radicals.

The cells are “free” because they are missing a critical molecule. These unstable cells now search for healthy cells so they can “steal” an electron to gain stability. Free radicals often injure the cell, damaging the DNA, which creates the seed for disease. When a cell’s DNA changes, the cell becomes mutated. It grows abnormally and reproduces abnormally – and quickly. One free radical can set off a whole chain reaction which overwhelms the body’s natural free radical defense system. This can lead to cancer, diabetes, cataracts, cardiovascular disease and wrinkles.

Pesticides and other toxins in our food and water; excessive amounts of alcohol; cigarette smoke and air pollution, are “free radical generators”.

Antioxidants

Antioxidants, which are found in fruits and vegetables, work to stop the damaging and disease-causing chain reactions. In order to gain the maximum benefit of antioxidants found in nature, our diets must include fruits and vegetables of all colors. Some of the best antioxidants include:

- Green, black and oolong tea
- Beans- red, black, pinto and kidney
- Artichoke hearts
- Raw spinach
- Baked sweet potato
- Eggplant
- Berries – cranberries, wild blueberries and blackberries are the highest
- Apples
- Tomatoes – cooked
- Pecans, walnuts, hazelnuts

For more food sources please visit www.dietaryfiberfood.com

Sources: www.webmd.com; Jeffrey Blumberg, PhD, Tufts University
www.antioxidantfacts.net
<http://shrike.depaul.edu>